

EILAR ASSOCIATES, INC.

ACOUSTICAL & ENVIRONMENTAL CONSULTING

June 20, 2007

Warner Springs LLC
c/o Peterson Environmental Services
Attention: John Peterson
5580 LaJolla Boulevard #398
LaJolla, California 92037
peterspmenv@hotmail.com
Cell: 858-220-0877

Job: #A50619N1

**SUBJECT: TRAFFIC NOISE IMPACT PLANNING FOR WARNER SPRINGS ESTATES, COUNTY OF
SAN DIEGO; TM 5450RPL1**

Introduction

This letter is to address traffic noise impacts for site development permit approval for the Warner Springs Estates (The Highlands) in an undeveloped area within the County of San Diego.

All noise level or sound level values presented herein are expressed in terms of decibels, with A-weighting to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L_{EQ} , for a specified duration. The CNEL is a 24-hour average, where sound levels during evening hours of 7:00 p.m. to 10:00 p.m. have an added 5 dB weighting, and sound levels during nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dB weighting. This is similar to the Day-Night sound level, L_{DN} , which is a 24-hour average with an added 10 dB weighting on the same nighttime hours but no added weighting on the evening hours. Sound levels expressed in CNEL are always based on A-weighted decibels. These metrics are used to express noise levels for both measurement and municipal regulations, for land use guidelines, and for enforcement of noise ordinances. Further explanation can be provided upon request.

Project Setting

The Warner Springs Highland project is a 149.68-acre development of 28 single-family, detached residences, located off Los Coyotes Road, in the community of Warner Springs, in the unincorporated area of the County of San Diego, California. The Assessor's Parcel Number (APN) is: 137-090-37. Please refer to Figures 1 and 2 for the Vicinity Map and site plan.

Information regarding Los Coyotes Road was obtained from Kenneth J. Brazell, Project Manager, Department of Public Works with the County of San Diego, (619) 694-2728, on July 20, 2006.

Los Coyotes Road is designated as a rural light collector in the circulation element. Traffic volumes on Los Coyotes Road are low and within standards for a private road.

The San Diego County General Plan 2020 has proposed to delete Los Coyotes Road from the General Plan Circulation Element. On May 18, 2007, DPW approved the "Request for Road Design Standard" for Los Coyotes Road per County Private Road Standards, Section 3.1C, with a reduced graded width varying from 24 to 28 feet.

A new traffic count on Los Coyotes Road was made and the survey results are attached to this report as Attachment B. The study shows all traffic days counted below 100 vehicles per day.

No agricultural facilities are located near or beyond the proposed development on Los Coyotes Road.

County of San Diego Regulations

The County of San Diego limits exterior noise levels at proposed residential outdoor use areas to 60 CNEL or less.

Site Visit

No site visit was needed, or made for this project, due to the extremely low current traffic volumes.

Roadway Noise Calculation

The Sound32 Release 1.41 program released by the California Department of Transportation, Division of New Technology, Materials and Research was used to calculate the future daytime average hourly noise level (HNL) at various locations at the project site. The daytime average hourly traffic volume is calculated as 0.058 times the ADT, based on the studies made by Wyle Laboratories (see reference). The HNL is equivalent to the L_{EQ} , and both are converted to the CNEL by adding 2.0 decibels, as shown in the Wyle Study. Future CNEL is calculated for desired receptor locations using future road alignment, elevations, lane configurations, projected traffic volumes, estimated truck mixes, and vehicle speeds. Noise attenuation methods may be analyzed, tested, and planned with Sound32, as required. Further explanation can be supplied on request.

Impacts

Please see Appendix A, Sound 32 Data and Results for the traffic volumes and Sound 32 traffic noise model information.

Traffic noise modeling of the future roadway traffic volumes shows that the future 60 CNEL traffic noise contour is located at or less than 100 feet from the center line of Los Coyotes Road.

The site should not require blasting, rock grubbing or breaking. Normal site and entrance road development can be done within compliance of San Diego construction noise ordinances. Refer to the attached geological letter (Appendix C).

Planning

Based on the above analysis, the project proponent has redesigned the tentative lot layout shown in the attached tentative map (Figure 2). The planned residential sites are either beyond the 100 foot center line distance or have only a small corner of usable lot space 100 foot from the centerline location. Thus, the planned residences and a majority of the usable exterior parcels will be outside of the 60 CNEL contour area.

Mitigation

No further mitigation or planning is required.

Certification

The findings and recommendations of this acoustical analysis report are based on the information available and are a true and factual analysis of the potential acoustical issues associated with the Warner Springs Estates (The Highlands) project Los Coyotes Road in the Community of Warner Springs, County of San Diego, California. This report was prepared by Charles Terry, and Douglas K. Eilar.

EILAR ASSOCIATES



Charles Terry, Senior Acoustical Consultant



Douglas K. Eilar, Principal

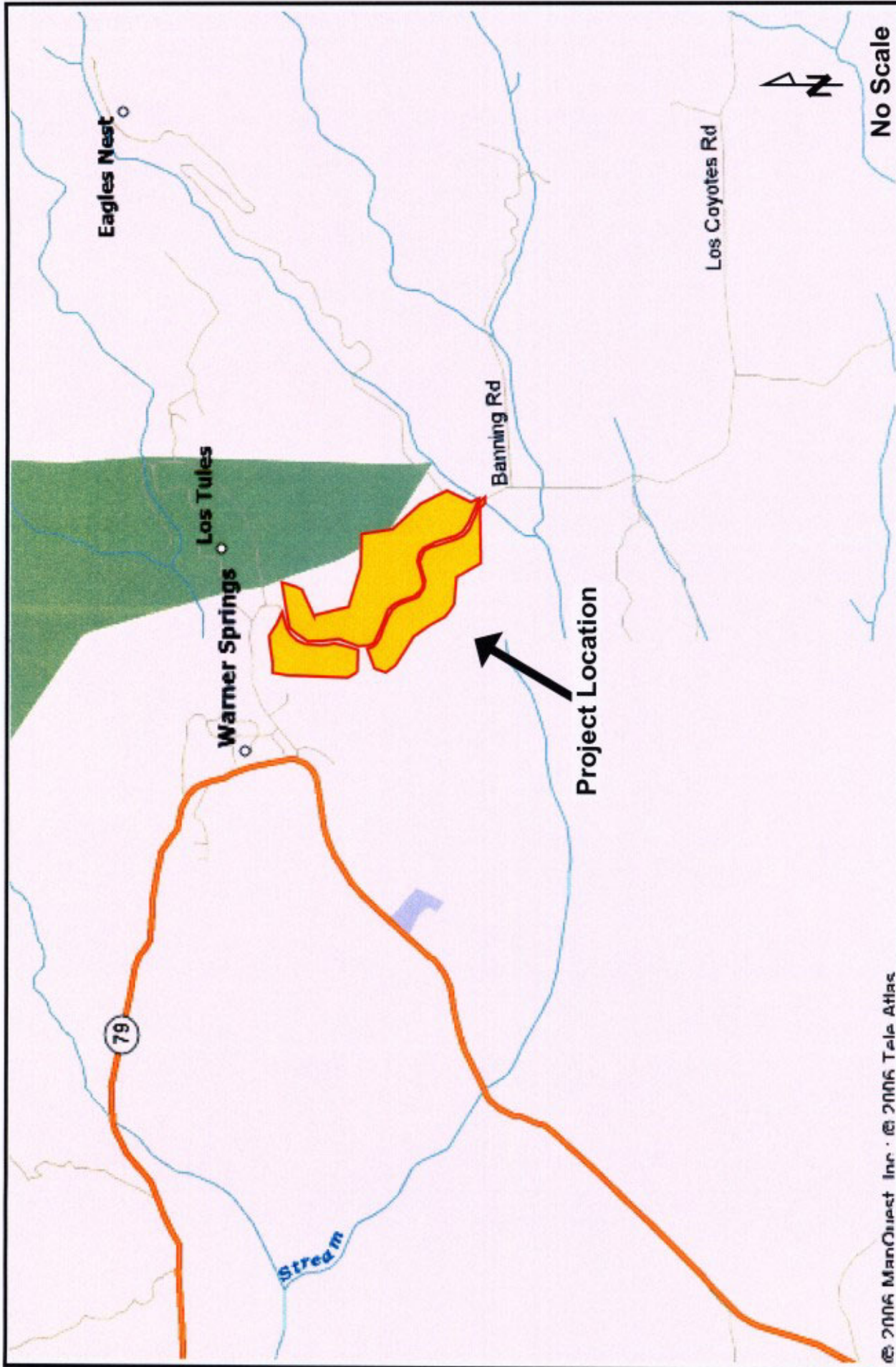
Figures

1. Vicinity Map
2. Site Plan

Appendix

- A. Sound 32 Data Results
- B. Traffic Data
- C. Geological Letter

FIGURES



Eilar Associates
 539 Encinitas Boulevard, Suite 206
 Encinitas, California 92024
 760-753-1865

Thomas Guide Map
 Job # A50619N1

Figure 1

**FINAL SITE PLAN FOR
THE HIGHLANDS AT WARNER SPRINGS
1-20-06**

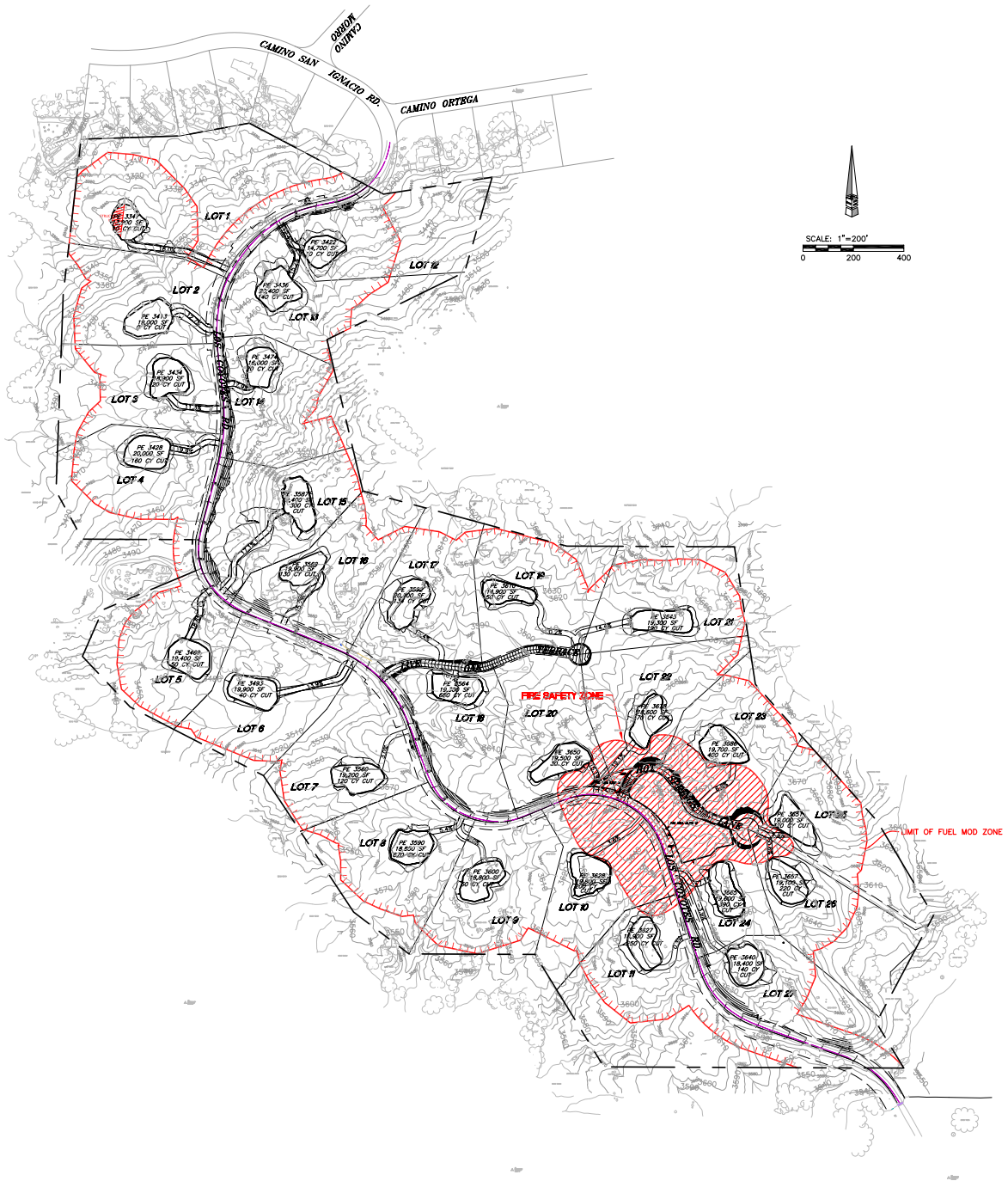


Figure 2 Job A51207N1

APPENDIX A

Sound32 Data Results

Sound 32 Data and Results

Warner Springs Highland

| Table 1. Future Traffic Conditions | | | | | |
|---|-------------------|------------------|-------------------|--------------------|-------------------|
| Roadway | Hourly Percentage | Total % ADT | Autos (Hourly) | Medium (Hourly) | Heavy (Hourly) |
| Los Coyotes | 5.80% | 100.00% 2,200 | 97.50% 124 | 2.00% 3 | 0.50% 1 |

Future Traffic Reference Information

- Future Traffic ADTs (2030) for Interstate 8 and Old Highway 80 was obtained from the San Diego Associations of Governments (SANDAG)
<http://maximus.sandag.org/tfic/trfic30.html>

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : FUTCON.TXT
 BARRIER COST FILE : CALIF\$.DTA
 DATE : 02-01-2006

A50619N1 - Warner Springs

TRAFFIC DATA

| LANE NO. | AUTO VPH MPH | | MEDIUM TRKS VPH MPH | | HEAVY TRKS VPH MPH | | DESCRIPTION |
|----------|--------------|----|---------------------|----|--------------------|----|-----------------|
| 1 | 125 | 30 | 3 | 30 | 1 | 30 | LOS COYOTES/CSI |
| 2 | 125 | 30 | 3 | 30 | 1 | 30 | LOS COYOTES/CSI |

LANE DATA

| LANE NO. | SEG. NO. | GRADE COR. | X | Y | Z | SEGMENT DESCRIPTION | |
|----------|----------|------------|--------|---------|--------|---------------------|-----|
| 1 | 1 | NO | 920.0 | 1820.0 | 3370.0 | L1 | P1 |
| | 2 | NO | 824.0 | 1750.0 | 3400.0 | L1 | P2 |
| | 3 | NO | 644.0 | 1710.0 | 3405.0 | L1 | P3 |
| | 4 | NO | 500.0 | 1600.0 | 3425.0 | L1 | P4 |
| | 5 | NO | 330.0 | 1420.0 | 3450.0 | L1 | P5 |
| | 6 | NO | 290.0 | 1190.0 | 3475.0 | L1 | P6 |
| | 7 | NO | 300.0 | 870.0 | 3425.0 | L1 | P7 |
| | 8 | NO | 250.0 | 590.0 | 3515.0 | L1 | P8 |
| | 9 | NO | 224.0 | 330.0 | 3525.0 | L1 | P9 |
| | 10 | NO | 274.0 | 190.0 | 3540.0 | L1 | P10 |
| | 11 | NO | 520.0 | 50.0 | 3550.0 | L1 | P11 |
| | 12 | NO | 880.0 | -120.0 | 3575.0 | L1 | P12 |
| | 13 | NO | 1000.0 | -260.0 | 3600.0 | L1 | P13 |
| | 14 | NO | 1180.0 | -670.0 | 3625.0 | L1 | P14 |
| 2 | | | 1350.0 | -750.0 | 3630.0 | L1 | P15 |
| | 1 | NO | 1700.0 | -650.0 | 3630.0 | L2 | P1 |
| | 2 | NO | 1900.0 | -680.0 | 3645.0 | L2 | P2 |
| | 3 | NO | 2020.0 | -810.0 | 3625.0 | L2 | P3 |
| | 4 | NO | 2200.0 | -1400.0 | 3600.0 | L2 | P4 |
| | 5 | NO | 2380.0 | -1560.0 | 3575.0 | L2 | P5 |
| | | | 2880.0 | -1770.0 | 3545.0 | L2 | P6 |

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RECEIVER DATA

REC.

| NO. | X | Y | Z | DNL | PEOPLE | ID |
|-----|--------|---------|--------|-----|--------|------|
| 1 | 900.0 | 1770.0 | 3380.0 | 67 | 500 | R-1 |
| 2 | 860.0 | 1743.0 | 3385.0 | 67 | 500 | R-2 |
| 3 | 700.0 | 1693.0 | 3400.0 | 67 | 500 | R-3 |
| 4 | 557.0 | 1597.0 | 3420.0 | 67 | 500 | R-4 |
| 5 | 380.0 | 1420.0 | 3425.0 | 67 | 500 | R-5 |
| 6 | 340.0 | 1190.0 | 3440.0 | 67 | 500 | R-6 |
| 7 | 270.0 | 870.0 | 3451.0 | 67 | 500 | R-7 |
| 8 | 330.0 | 590.0 | 3480.0 | 67 | 500 | R-8 |
| 9 | 274.0 | 330.0 | 3500.0 | 67 | 500 | R-9 |
| 10 | 324.0 | 190.0 | 3560.0 | 67 | 500 | R-10 |
| 11 | 570.0 | 50.0 | 3525.0 | 67 | 500 | R-11 |
| 12 | 930.0 | -120.0 | 3545.0 | 67 | 500 | R-12 |
| 13 | 1050.0 | -235.0 | 3560.0 | 67 | 500 | R-13 |
| 14 | 1230.0 | -650.0 | 3590.0 | 67 | 500 | R-14 |
| 15 | 1400.0 | -750.0 | 3605.0 | 67 | 500 | R-15 |
| 16 | 1770.0 | -615.0 | 3625.0 | 67 | 500 | R-16 |
| 17 | 1960.0 | -680.0 | 3635.0 | 67 | 500 | R-17 |
| 18 | 2070.0 | -810.0 | 3640.0 | 67 | 500 | R-18 |
| 19 | 2255.0 | -1390.0 | 3620.0 | 67 | 500 | R-19 |
| 20 | 2425.0 | -1530.0 | 3600.0 | 67 | 500 | R-20 |
| 21 | 870.0 | 1820.0 | 3350.0 | 67 | 500 | R-21 |
| 22 | 794.0 | 1775.0 | 3355.0 | 67 | 500 | R-22 |
| 23 | 604.0 | 1710.0 | 3370.0 | 67 | 500 | R-23 |
| 24 | 470.0 | 1600.0 | 3380.0 | 67 | 500 | R-24 |
| 25 | 300.0 | 1420.0 | 3395.0 | 67 | 500 | R-25 |
| 26 | 220.0 | 1190.0 | 3410.0 | 67 | 500 | R-26 |
| 27 | 320.0 | 870.0 | 3455.0 | 67 | 500 | R-27 |
| 28 | 230.0 | 590.0 | 3450.0 | 67 | 500 | R-28 |
| 29 | 194.0 | 330.0 | 3470.0 | 67 | 500 | R-29 |
| 30 | 244.0 | 190.0 | 3530.0 | 67 | 500 | R-30 |
| 31 | 505.0 | 30.0 | 3532.0 | 67 | 500 | R-31 |
| 32 | 850.0 | -135.0 | 3535.0 | 67 | 500 | R-32 |
| 33 | 970.0 | -250.0 | 3540.0 | 67 | 500 | R-33 |
| 34 | 1150.0 | -685.0 | 3560.0 | 67 | 500 | R-34 |
| 35 | 1320.0 | -765.0 | 3575.0 | 67 | 500 | R-35 |
| 36 | 1680.0 | -665.0 | 3595.0 | 67 | 500 | R-36 |
| 37 | 1850.0 | -770.0 | 3585.0 | 67 | 500 | R-37 |
| 38 | 2150.0 | -1400.0 | 3525.0 | 67 | 500 | R-38 |
| 39 | 2330.0 | -1560.0 | 3490.0 | 67 | 500 | R-39 |
| 40 | 2830.0 | -1770.0 | 3470.0 | 67 | 500 | R-40 |

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DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 3.0 DBA

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K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

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APPENDIX B

Traffic Data

[illegible]

[illegible]

APPENDIX C

Geological Letter

Peterson Environmental Services
Providing Services In
Environmental Processing
and Hydrogeology

January 31, 2007

Charles Terry
Eilar and Associates
539 Encinitas Blvd. Suite 206
Encinitas Ca. 92024

Subject: Geological Materials on *Highlands at Warner Springs* TM 5450

Dear Mr. Terry:

I offer the following information in response to your inquiry regarding the potential need for blasting or rock breaking on the Highlands Tentative Map.

The site is composed of a thick sequence of decomposed granite (DG), overlying fracture granitic rock. The decomposed granite is thick and is very workable with heavy equipment.

The following information supports this conclusion.

- 1) Four groundwater wells have been constructed on the site. The wells were drilled throughout the project and the wells encountered DG to depths of 160, 160, 275 and 60 feet.
- 2) Within the geotechnical testing many trenches were dug with a backhoe. These trenches were installed by Mike Hart to investigate potential faults on the project. All trenches were installed through DG with a backhoe. Some of the trenches were up to 18 feet deep.
- 3) In the investigation regarding the location of future septic systems Larry Newcomb has installed many test holes to determine onsite soil conditions. No fractured unweathered rocks were encountered during these tests.

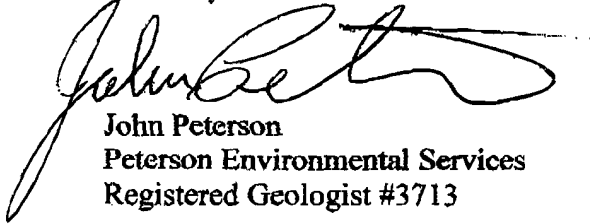
These in field tests prove the presence of a thick sequence of DG that should not require any blasting or rock breaking. The DG on the site appears to be very workable with heavy equipment.

However no absolute guaranty can be offered that no isolated hard rock boulders could be encountered during grading. But overall geological conditions support the conclusion that the near surface materials should not require any blasting or rock breaking.

JOHN PETERSON
Professional Geologist #3713
Certified Hydrogeologist #90
5580 La Jolla Blvd. #398 La Jolla, CA 92037
Cell Ph # 858-220-0877 Office/Fax # 858-551-7549
Email petersonenv@hotmail.com

Please let me know if you need any additional information on this topic.

Sincerely

A handwritten signature in black ink, appearing to read 'John Peterson', with a long horizontal flourish extending to the right.

John Peterson
Peterson Environmental Services
Registered Geologist #3713